



# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

Applicant's or agent's file reference P1710-MAZ	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/1 1506	International filing date (day/month/year) 17.10.2003	Priority date (day/month/year) 29.10.2002
International Patent Classification (IPC) or both national classification and IPC H04Q7/34		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (publ) et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  24.05.2004	Date of completion of this report  14.07.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Aguilar Cabarrus, E  Telephone No. +49 89 2399-7524  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/11506

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-26 as originally filed

**Claims, Numbers**

1-23 as originally filed

**Drawings, Sheets**

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-23
	No: Claims	
Inventive step (IS)	Yes: Claims	1-23
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Reference is made to the following document:**

**D1: EP 1 063 819 A1**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The present invention relates to a **method** for adaptation of multi-user multimedia data in a communication system **and** to a corresponding **intermediate network part** according to preambles of respective **independent claims 1 and 20**.
2. Point-to-multipoint services (like video-conferencing, whiteboarding, real-time multi-user games) require high demands on the network infrastructure and consume considerable amounts of bandwidth. This kind of multimedia applications uses for transport broadcast or multicast mode. Various **methods** for adaptation of multi-user multimedia data are **known in the art**.

Document **D1** describes a method to create a topology map indicating the quality of connectivity of each network device of a wireless network with all other network devices in said wireless network. First, a calibration signal is successively broadcasted by each network device. All respective other network devices receiving said calibration signal measure the signal quality. Secondly, the measurements are transmitted from each network device to the network device creating said topology map for said topology map to be created.

3. A main **disadvantage** related to most of the methods for adaptation of multi-user multimedia data is that the network device creating the topology map needs the input of the network devices, increasing so the uplink congestion.
4. The **present invention** overcomes this problem by providing a **method** for adaptation of multi-user multimedia data in a communication system **and** a corresponding **intermediate network part** according to the characterising portions of respective **independent claims 1 and 20**.

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According to the **essential features of the invention**, an intermediate network part providing information on communication between a server and the clients is defined, which forwards data stream from the server to the clients, determines the distribution characteristics associated with the clients and generates a feedback report on the clients' reception conditions of the data stream considering the distribution characteristics. The feedback report includes information about aggregation fashion. Furthermore, the feedback report is sent to the server, which adapts the transmission of the data stream from the server to the clients according to the aggregated feedback report.

5. The present invention provides the **advantage** of efficient utilisation of scarce and expensive network resources in wireless networks, in particular on the uplink direction.
6. The subject-matter of the present invention as claimed in respective independent claims 1 and 20 is neither disclosed in, nor rendered obvious by the remaining **prior art documents** cited in the international search report since said documents do **not** describe the method or intermediate network part according to the particular feature combination of the present invention or part thereof as defined in respective claims 1 and 20.
7. The subject-matter of respective independent **claims 1 and 20** is, therefore, considered to be new and to involve an inventive step, Articles 33(2) and (3) PCT.
8. As **claims 2 to 19 and 21 to 23** are dependent on respective claims 1 and 20, said **claims 2 to 19 and 21 to 23** do **also meet** the requirements of Articles 33(2) and (3) PCT.
9. The present invention is **susceptible of industrial application**, Article 33(4) PCT.

**Remarks:**

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1. The features are not provided with **reference signs** placed in parentheses (Rule 6.2(b) PCT).
2. Document **D1** and the **relevant background art** disclosed therein are not mentioned in the opening part of the description (Rule 5.1(a)(ii) PCT).